DOCUMENT RESUME

ED 444 088 CG 030 238

AUTHOR Hopkins, David

TITLE A Potential for Violent Injury: Guns and Knives in the

Schools. Oregon Health Trends, Series No. 56.

INSTITUTION Oregon State Dept. of Human Resources, Portland. Health Div.

PUB DATE 2000-06-00

NOTE 17p.

PUB TYPE Information Analyses (070) EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Family Involvement; Gun Control; *High Risk Students; High

School Students; High Schools; Influences; Mass Media Role;
*Prevention; Surveys; Trend Analysis; *Violence; *Weapons;

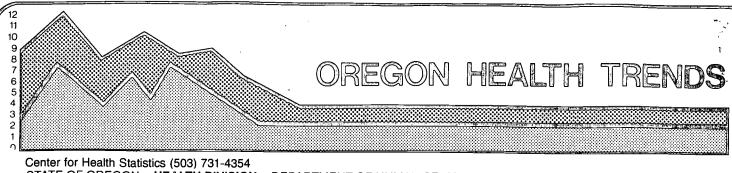
Youth Problems

IDENTIFIERS Oregon; Youth Risk Behavior Survey

ABSTRACT

This report focuses on the causative factors of violence in school children. It summarizes information about the demographic and mental health characteristics of students who carry weapons to school and includes comments from students on the reasons why they carry them, as well as what the research says. Results of the 1999 Youth Risk Behavior Survey, administered to 109 high schools in the state of Oregon who voluntarily participated, are highlighted throughout the report. The influence of television on risky behaviors among youth is considered. Prevention programs are discussed, including family education about gun safety, gun availability, and national legislation to help keep guns away from students. The report includes Table One, "Percentage of Students Who Carried Weapons during the Previous 30 Days, by Demographic and Behavioral Characteristics," and Table Two, "Selected Demographic and Behavioral Characteristics by Hours of Television Watching." (Contains 11 endnotes and 8 figures.) (JDM)





STATE OF OREGON . HEALTH DIVISION . DEPARTMENT OF HUMAN SERVICES

A POTENTIAL FOR VIOLENT INJURY Guns and Knives in the Schools

SERIES NO. 56 JUNE 2000

The first nine years of the 1990s saw the gunshot deaths of 406 Oregon youth 19 or younger, or about one death every eight days. Knives, clubs, and other weapons claimed additional youth. Children as young as two months were intentionally shot to death but most deaths were suicides and homicides of high school-aged youth.1

During the 1999 school year, at least 13,000 Oregon high school students are estimated to have carried guns, knives, and/or clubs to school (at least once during the previous 30 days).2 Twenty-three thousand high school students carried weapons at school or elsewhere. These potentially lethal objects, particularly firearms, can pose a danger not only to the weapon carrier and his or her school mates. but to all Oregonians.

Self-reported data from the 1999 Youth Risk Behavior Survey (YRBS) show that risk factors from multiple domains (demographic, environmental, and behavioral) are associated with weapon-carrying both in and out of school, and that youth who participate in one form of risk-taking behavior are more likely to also be involved in other forms of risky behavior. This newsletter summarizes information about the characteristics of weapon carriers and more specifically focuses on weaponcarrying in the schools. Also discussed. are the associations between weapon-

Among 14- to 18-year-olds, gunshot wounds were the second leading cause of death.

> U.S. DEPARTMENT OF EDUCATION
> Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- ☐ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Proportion of Oregon High School Students Carrying Weapons Anywhere During the Previous 30 Days, 1999 YRBS (Gun 319% Did Not Carried Carry Weapons 149% 86% Other 69%

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."



Methodology

All school superintendents for each of Oregon's public schools with grades 9,10, 11, or 12 were invited to participate in the 1999 Youth Risk Behavior Survey (YRBS). Of the 230 schools, 109 chose to participate, returning 25,255 surveys. Nearly one in ten (9.3%) of the surveys were excluded because of prevarication, invalid answers, incomplete data and other reasons. After data editing, the convenience sample included 22,913 usable surveys representing 14.1% of the state's 162,568 high school students. Each student survey was assigned a weight based on the student's grade level and the size and socioeconomic rank of his or her school to more accurately represent Oregon's population of public high school students. In the strictest statistical sense, these data cannot be referred to as typical Oregon students, since the schools were not randomly chosen.

Survey participation required permission at the district and school level, as well as from the students and their parents. For more information, see the forthcoming 1999 Oregon Youth Risk Behavior Survey Summary Report.

carrying and the student's family and environment (e.g., adult support, physical abuse).

STUDENT CHARACTERISTICS

More than 100 years ago, Henry David Thoreau wrote that "nothing is so much to be feared as fear."3 The spate of recent school shootings and accompanying media coverage have prompted more students to report fearing for their safety at school.4 Data from the 1999 Oregon YRBS suggest that thousands of Oregon high school students carried weapons at school. Eight percent of the surveyed students reported carrying a gun, knife, or other weapon to school at least once during the prior 30 days. Fourteen percent said they carried a weapon at school or elsewhere. Statewide, an estimated 1,300 high school students (0.8%) took a gun to school during the previous 30 days while an estimated 6,700 (4.1%) carried guns to school or elsewhere. One in five students who carried guns, took them to school. Although some students reported carrying weapons as "tools" (e.g., for use on the farm or ranch), others reported carrying weapons for defensive purposes.

Demographic Characteristics

Little difference was seen in weapon-carrying prevalence by grade, but strong associations are apparent by gender and race/ethnicity.

Gender. Males of all ages more often engage in risky behaviors than females of a similar age, and this penchant is apparent in the prevalence of weapon-carrying at school. One in seven male high school students (13.7%) reported carrying guns, knives or clubs to school at least once during the 30 days preceding the survey, compared to just one in forty (2.5%) females (Table 1).

<u>Race/ethnicity.</u> In Oregon high schools, certain racial/ethnic minority groups were more likely to carry weapons to school. In rank order, the

prevalence of weapon-carrying was: American Indians, 12.6%; African Americans, 11.9%; Pacific Islanders, 9.4%; whites, 8.0; Hispanics, 7.9%; and Asians, 4.7%. Gun-carrying at school was most prevalent among African American students, who were 7.3 times more likely to carry firearms than were non-Hispanic whites.

The Student's Environment

School Environment. Contrary to what is often perceived by the public, weapon-carrying at school was more common among students in small rural high schools than larger urban ones. (This pattern held regardless of geographic region.) One in eight students who attended schools where the student body numbered less than 100 carried weapons compared to one in 16 in Tri-county (Clackamas, Multnomah, Washington counties) schools where the student body was 800 or greater (11.9% vs. 6.1%).

Poverty and behavior are linked. The Oregon Department of Education assigns a numeric rank to each school in the state based on the percentage of students eligible for free or reduced price lunch, the student mobility rate, student attendance rate, and the level of education of the most educated parent. Students attending schools in the lowest socioeconomic group were 34 percent more likely to carry weapons to school than were those in the highest socioeconomic group (9.0% vs. 6.7%).

Home Environment. Students who lived in homes where tobacco smoke was present, who had no adults with whom they could discuss their problems, who had been physically and/or sexually abused, and viewed at least five hours of television daily were more likely to carry weapons than were others. A fuller discussion of the home environment and student behavior is included in the report Suicidal Behavior: A Survey of Oregon High School Students, 1997,



also published by the Center for Health Statistics.

The stronger the adult social support network, the less likely teenagers were to carry weapons. While 6.7 percent of high school students who had two or more adults with whom they could discuss their problems took weapons to school during the previous month, 12.8 percent without supportive adults carried weapons. The figures for gun-carrying in the schools were 0.6 percent and 1.6 percent, respectively. Other studies have shown strong links between violence and low academic orientation, and with lack of parental affection and support.5

Another measure of family cohesion and appropriate child-rearing practices is the amount of television a child is allowed to watch. One-quarter of Oregon high school students reported watching an average of three or more hours of television on school days. The more television the student watched, the greater the likelihood that he or she would carry weapons or be involved in violence. While 7.3 percent of students who watched two hours or less of televi-

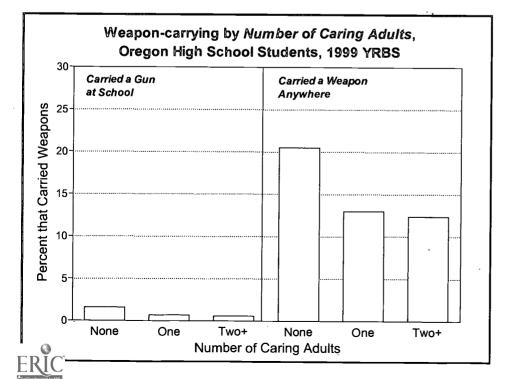
sion (per school day) carried weapons to school, 12.1 percent of those who watched at least five hours daily had weapons with them at school. Heavy viewers were over three times more likely to take guns to school than were their lighter-viewing counterparts.

National studies have shown that most physical abuse (72%) is perpetrated by the natural parents of a child while other parents and caretakers account for most of the remainder (21%).⁵ The one in eight students who reported that they had been purposely hit, slapped, or physically hurt by an adult family member were twice as likely to take weapons to school as were their counterparts who had not been abused (14.3% vs. 7.1%).

Growing up in a home where secondhand tobacco smoke is present puts children at risk of developing respiratory disorders; cigarette smoking also serves as a marker of a poorer socioeconomic environment as it is associated with lower levels of education and income. Students exposed to secondhand smoke in the home were more than half-again as

Throughout this article, and in their own words, are statements made by the students; they are reproduced as written and placed in quotes.

"Get parents more involved w/childrens lives. Stop blaming kids, EVERY TEENAGEPROBLEM STARTS AT HOME. Society reaps what it sows; abusive parents raise abusive children and severity of abuse is increasing. No matter what the press says, the families of the Littleton killers were not healthy!"



"I live in a rural setting so carrying a gun or knife is common. I carry a knife myself but don't use it as a weapon or to protect myself. I use it to cut strings on the bales and stuff like that, but it's easier to carry it all the time."

"WHEN YOUR PARENTS HIT YOU IT'S NOT TO BE MEAN IT IS TO TEACH YOU A LESON SO IT'S NOT BAD. SOME TIME IT'S THE ONLY WAY TO GET THROUGH TO YOUR CHILD SO DON'T BLAIM THE PAR-ENTS CAUSE IT USUALLY AIN'T BAD."

"Being a teenager is so hard. I hate it. Not only do I have to worry about the normal everyday things but the judgment too, of other students upon me because I suffer from depression. Such a big disease yet so little knowledge about it. I hate it. I feel sad and angry most of the time. I can't wait to grow up now. Now I'm even more afraid of coming to school after the shooting in Columbine."

likely to take weapons to school than those in smoke-free households (11.1% vs. 7.0%).

In a study published last year, researchers concluded that maternal smoking during pregnancy was a predictor of persistent criminal behavior in males. Even after controlling for other health, demographic, and behavioral characteristics of the parents during and after pregnancy, there was a dose-response relationship between maternal smoking and violent and nonviolent criminal behavior of the child — the more the mother smoked, the more likely her son was to engage in criminal behavior.6 This increased likelihood of criminal behavior persisted until at least age 34. Maternal prenatal smoking has also been associated with other externalizing behaviors, including impulsivity, truancy, conduct disorder and attentional difficulties.5

Student Mental Health

The YRBS includes four questions on sad feelings and suicidal ideation/behavior. As the degree of reported emotional stress increases from sadness to considering suicide to requiring professional treatment for a suicide attempt, so does the likelihood of weapon-carrying.

Suicidal Behavior. Depressed juveniles can present a threat to both themselves and others. Students who attempted suicide within the 12 months prior to the survey (and were treated for injuries by a physician or nurse) were 3.5 times as likely to carry weapons to school (25.4% vs. 7.2%) and 5.5 times more likely to take a gun to school (3.3% vs. 0.6%) than those who did not report feelings of sadness. Weapon- and firearm-carrying anywhere were 2.4 times (31.4% vs. 13.1%) and 3.6 (14.2% vs. 4.0%) times higher, respectively, among treated suicide attempters than among those who reported no sadness.

Student Behavior

Weapon-carrying is strongly associated with a constellation of highrisk personal behaviors. Among the best warning signs (as revealed by the YRBS) are substance abuse and sexual activity at an early age. Other studies have linked weapon-carrying with selling drugs, committing nonviolent felonies, and engaging in delinquency.

Among youth who carried guns to high school, more than one in four (28.3%) reported having made a suicide attempt.

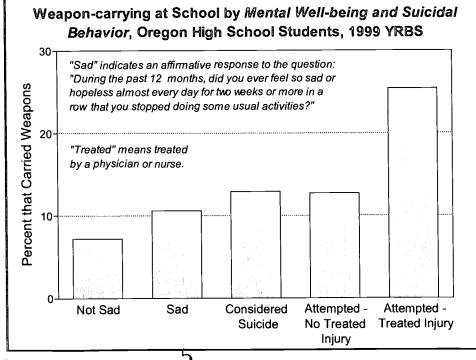




Table 1. Percentage	e of Stude	nts Who	Carrie	Weapo	ons Dur	ing the	Previou	ıs 30 Da	ys, by	Demogr	aphic and
		avioral (% Carried
Characteristic	% with Charac-	% Carried a Weapon Anywhere		% Carried a Gun Anywhere		% Carried A Weapon to School			a Gun to		
	teristic	——— Total	———— Male	Female	Total	Male	Female		Male	Female	School
Total	100	14.0	24.2	4.5	4.1	7.3	1.1	8.0	13.7	2.5	Total 0.8
Grade	. ,			1				0.0	10.7	2.0	0.0
9	28	14.6	25.3	5.1	4.3	7.5	1.4	8.0	13.4	3.0	0.9
10	26	15.1	25.5	5.0	4.3	7.4	1.3	8.5	14.5	2.6	0.5
11	24	12.8	22.3	3.7	3.9	7.2	0.8	7.4	12.9	2.1	0.7
12	21	13.4	23.2	3.8	4.0	7.2	0.9	8.1	13.1	2.1	0.9
Race/Ethnicity ²				1					10.1	۲. ۱۱	0.5
White	86	13.9	24.6	4.2	4.0	7.2	1.0	8.0	13.9	2.3	0.6
Asian	4	6.7	9.3	4.4	2.1	2.5	1.7	4.7	6.3	3.1	
American Indian	4	21.3	32.6	10.2	6.1	10.3	2.0	12.6	19.2	5.8	0.9
Hispanic	7	14.0	23.2	4.4	4.4	7.3	1.5	7.9	12.7		1.1
Pacific Islanders	2	20.0	32.2	7.0	7.3	12.3	2.2	7. 9 9.4		2.7	1.4
African American	2	20.5	30.1	7.9	8.3	12.9	2.1	9.4 11.9	.16.8 17.7	1.1	2.5
School Size (Number				7.5	0.5	. 12.9	2.1	11.9	17.7	4.1	4.4
<100 (Anywhere)	2	26.8	43.7	10.1	15.0	25.7	4.4	44.0	00.0	ا م	
100-399 (Anywhere)	11	20.2	34.2	6.1	8.8	25.7 15.7	1	11.9	20.2	3.4	0.4
400-799 (Anywhere)	15	20.2 17.9	31.0				1.9	10.9	18.8	2.6	1.2
800+ (Not Tri-County)	44	12.9		6.0	5.1	9.2	1.4	11.0	19.3	3.3	0.8
800+ (Tri-County)			21.9	4.3	3.5	6.1	1.0	7.4	12.4	2.4	0.7
School Socioeconom	28 io Carres	10.8	19.4	3.0	2.3	4.0	0.8	6.1	10.5	1.9	0.7
		400	00.0	اء م						7.1	
1 (Lowest)	12	16.9	28.6	6.2	5.8	9.6	2.2	9.0	15.4	3.0	0.8
2	23	15.4	27.0	4.6	4.9	8.9	1.2	9.0	15.7	2.5	1.0
3 4 (1 fmh 4)	30	14.5	25.3	4.3	4.4	8.0	1.0	8.5	14.4	2.7	0.8
4 (Highest)	36	11.9	20.1	3.9	2.9	5.1	0.8	6.7	11.4	2.0	0.6
Number of Caring Adı				1							
None	16	20.5	30.0	8.1	3.6	9.4	1.8	12.8	18.6	5.0	1.6
	21	13.0	24.9	4.9	6.1	7.0	1.3	7.7	14.9	2.7	0.7
2+	63	12.4	21.9	3.5	3.6	6.7	0.9	6.7	11.7	1.9	0.6
Number of Hours Wat											
≤2	73	13.0	23.3	4.5	3.9	7.2	1.2	7.3	13.0	2.5	0.6
3-4	22	15.1	24.0	4.3	4.2	7.0	0.9	8.8	13.9	2.5	0.8
5+	6	20.8	30.2	5.1	5.6	8.4	0.9	12.1	17.8	2.2	· 1.9
Adult Family Member		-		r Physic	ally Hu	rt Stud	ent ⁴		•	•	
No	87	12.8	22.2	3.6	3.7	6.6	0.9	7.1	12.4	1.7	0.6
Yes	13	21.8	40.3	9.3	7.0	13.6	2.5	14.3	25.0	6.8	2.0
Smokers in the House	_						•			•	1
Vone	64	12.6	21.6	3.9	4.0	6.9	1.1	7.0	11.9	2.0	0.7
Yes - But Not Inside	20	14.9	27.4	4.4	3.5	6.6	1.0	8.8	16.2	2.5	0.5
Yes - Inside	16	18.3	30.6	6.8	5.5	9.9	1.3	11.1	18.3	4.1	1.5
Attempted Suicide4	•			•	4						
No	94	13.3	23.2	3.7	3.8	6.7	0.9	7.4	13.0	1.9	0.6
/es	6	22.9	53.1	12.5	8.3	23.1	3.2	16.0	35.4	8.9	3.3
Jumber of Cigarettes	on Days S	smoked⁵		•			1			0.01	0.0
)	75	11.1	19.4	3.2	3.4	5.9	0.9	5.9	10.3	1.5	0.5
10	23	21.4	37.5	7.7	5.9	10.9	1.7	13.4	23.4	4.8	1.5
ERIC	2	26.9	44.2	9.4	9.0	16.5	1.4	18.4	30.0	5.9	3.2

Table 1. Percentage	of Stude	nts Who	Carrie	d Weap	ons Duri , Oregon	ng the	Previou 1999 (F	s 30 Day	rs, by D	emogra	phic and
Characteristic	% with Charac-	% Carr	ied a Wo	eapon		rried a nywhere	Gun	% Carr	ied A W		% Carried a Gun to School
,	teristic	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Number of Days Dran	k Alcohol	5									•
0	56	8.3	14.7	2.4	2.2	4.0	0.6	4.2	7.4	1.1	0.2
1-5	31	16.5	29.9	5.4	4.5	8.7	1.1	9.3	16.7	3.0	0.6
6-20	11	28.0	41.7	10.8	9.3	14.0	3.4	18.0	27.1	6.4	2.7
20+	2	48.2	60.7	21.0	22.3	29.4	7.4	28.6	33.4	17.3	8.0
Number of Times Snif						, 	ا ہا۔			اء م	a =
0	98	13.6	23.5	4.3		7.1	1.0	7.6	13.2	2.3	0.7
1-2	2	28.7	47.7	10.1		14.7	3.4	17.9	28.9	6.8	2.4
3+	. 1	51.9	75.0	23.1	19.2	28.2	8.4	38.5	55.9	16.6	6.9
Number of Times Abu	and the second of the second of				1 00	- ^	4 6		10.0	2.2	0.7
0	98	13.5	23.5	4.1		7.0	1.0		13.3 35.9	2.2 17.9	9.5
1-2	1	42.7	58.1	27.0	1	24.0	12.0		35.9	17.9	
3+		44.2	59.4	24.9	18.8	28.0	7.1	20.1	34.5	19.7	J%
Ever Injected Drugs		ه مد ا		4.0		6.9	1.0	7.5	13.1	2.2	0.7
No	99		23.4	4.2	L	38.8	8.1		50.3	27.1	
Yes	1 	53.7	69.3	32.3	∡3.4	30.0	0.1	40.5	30.3	27.1	10.5
Number of Mood-alte					2.3	4.1	0.6	4.1	7.3	1.0	0.2
0	50	Î	14.7	2.3 4.6	1	4. 1 8.6	1.1		15.5		
1	21		27.1	4.6 6.8	1	10.6	1.6	i .	22.0		
2-4	27	21.4	36.4 69.9	31.3	1	33.3			45.7		
5+	2		09.9	31.3	21.5	33.3	9.0	3-7.0	40.7	20.1	, , , ,
Age at First Sexual In	3 a l		46.7	14.0	13.2	16.1	3.9	24.9	29.4	9.3	2.5
<u>≤</u> 12	10		39.9	7.4	1	12.7			22.6		
13-14	20		27.1	3.5	i	8.0		l.	16.2		L
15+ Never Had Sex	67	1	18.2	3.2		4.9			9.6		
Number of Types of I							0.,	1 0.0	0.0		
0	71		21.1	3.3	3.7	6.1	0.9	7.1	11.8	1.5	0.4
10	23	E .	31.5	5.2	1	9.4		1	17.5		
2	5	1				15.1		1	25.7		2.6
3		50.0				29.7			38.4	. 17.2	14.3
Number of Fights at	ı School⁴	1 . 55.6						•			
0	89	11.0	19.9	3.7	2.9	5.5	0.8	6.0	10.8	1.9	0.3
1-5	1	1			1	15.2		1	26.7	11.2	3.5
6+	· ·	69.3				47.1		53.7	56.4	36.7	25.7
Number of Times Th	reatened					hool⁴		•			
0	94					6.2	9.0	6.7	11.8	3 2.0	
1-5	5				1	15.0	7.7	25.6	30.5	14.	1
6+		60.7	67.8	34.2	2 34.4	39.2	17.0	42.1	47.	1 23.	1 17.8
Number of Environm	ental Risl	(Factor	S ⁸								1
0	14			1.9	3.1	4.9					L
1-3	58	12.5	21.6	2.	7 3.8	6.6		1			
4-6	22	17.1	33.9	6.4	4.2	9.0) 1.	1			1
7-9		5 25.4	52.9	12.	5 7.7	19.2					
+	1	1 39.4	67.5	23.	3 18.4	33.5	5 10.3	3 29.1	45.8	19.0	11.4

Table 1. Percentage of Students Who Carried Weapons During the Previous 30 Days, by Demographic and Behavioral Characteristics, Oregon YRBS, 1999 (Part 3)

Behavioral Characteristics, Oregon YRBS, 1999 (Part 3) ¹											
Characteristic	% with Charac-	% Carr	ried a W nywher			arried a nywhere		% Carr	ied A W	•	% Carried a Gun to
teristic	Total	Male	Female	Total	Male	Female	Total	Male	Female	School Total	
Number of Behaviora	l Risk Fac	tors9									
0	33	6.5	11.8	1.8	1.9	3.4	0.5	3.1	5.7	0.8	0.0
1-3	37	12.4	21.6	3.8	3.2	5.8	0.8	6.6	11.6	1.8	0.4
4-6	21	20.4	34.2	6.1	5.8	10.1	1.4	12.4	20.8	3.5	1.3
7-9	8	32.7	50.9	11.9	11.1	17.7	3.6	19.8	30.5	7.3	2.9
10+	1	60.9	74.2	44.7	29.5	43.6	12.9	43.1	49.7	34.9	12.9

- Based on 22,913 weighted cases from 109 schools.
- 2. Students could check one or more responses to describe their race/ethnicity; for example, a student who checked both "Hispanic" and "American Indian" would be represented in each of the two categories.
- 3. The Oregon Department of Education assigns a numeric value to each school in the state based on the percentage of students eligible for free or reduced price lunch, student mobility rate, student attendance rate, and the level of education of the most educated parent.
- 4. During the previous 12 months.
- 5. During the previous 30 days.
- 6. The number of types of substances abused by students was measured with eight questions. Affirmative responses to the abuse of marijuana, cocaine, inhalants, heroin, methamphetamines, injection drugs, tobacco, and alcohol were counted.
- 7. The data shown exclude responses from students who said that they were ever forced to have sexual intercourse.
- 8. A count of the following factors: physically assaulted by an adult family member, sexually abused (either by unwanted touching or forced intercourse), sexual harassment, racial harassment, sexual orientation (perceived) harassment, physical health condition, psychological health condition, a condition that effects the student's ability to go to school/do school work or make friends, living with smokers, watching five hours or more of television on the average school day, not eating a daily meal with family, and having fewer than two adults to go to for advice.
- 9. A count of the following factors: not using a seatbelt at least most of the time, smoking cigarettes, drinking alcohol, drinking and driving, binge drinking, vomiting or using laxatives to lose weight, participating in fights, marijuana use, cocaine use, methamphetamine use, heroin use, inhalant sniffing, drug injection, sexually activity, failure to use a condom during last sexual intercourse, ever caused or been pregnant.
 Note: Numbers in italics are based on a sample size of less than 50 and should be used with caution.

<u>Cigarette Smoking.</u> One in four high school students smoked cigarettes and the more cigarettes a student smoked, the more likely he or she was to take weapons to school. Heavy smoking (11 cigarettes or more daily) is one of the most visible warning signs that a high school student may carry weapons: one-fifth of students (18.4%) who smoked half a pack or more a day also carried weapons to school compared to 5.9% of non-smokers, a three-fold difference.

Alcohol Use. Consumption of alcohol is more strongly associated with weapon-carrying than is tobacco use, and an especially concerning one given the effects of alcohol on a drinker's judgment. Frequent drinkers (drinking on 20 or more of the previous 30 days) were seven times more likelythan abstainers to carry a weapon to school (28.6% vs. 4.2% of non-drinkers), and 40 times more likely to

vs. 0.2%). A study published by the National Center for Health Statistics showed that about half of youth homicide victims had elevated blood alcohol levels at autopsy.⁵

Drug Abuse. One-fourth of students said they abused drugs (including inhalants such as glue or paint) during the 30 days prior to the survey. Most strongly associated with weapon-carrying was drug injection; 41% of injection drug abusers took weapons to school. Abuse of inhalants, too, served as a marker for an increased likelihood of weapon-carrying. The minority of students who "huffed" three or more times during the preceding 30 days were five times more likely to carry weapons to school than were non-abusers (38.5% vs. 7.6%)

Just as the frequent abuse of a given drug is associated with weaponcarrying, so too is the abuse of multiple substances. The risk of weapon-carrying at school increased greatly among multi-drug abusers, and although the proportion was highest among males, the difference between multi-drug abusers and abstainers was greatest for females. High school students who abused five or more types of substances (including alcohol and tobacco) were over eight times more likely to carry a weapon to school (34.8% vs. 4.1%) and 39 times more likely to take a gun to school than were non-drug abusers (7.8% vs. 0.2%).

Sexual Behavior. Students whose first act of sexual intercourse (among those who reported no forced intercourse) occurred before age 13 were more likely to have carried weapons during the previous the 30 days; 24.9 percent who engaged in sex as pre-teens carried weapons to school compared to 5.6 percent of those who had never had sex. Multiple sexual partners, lack of condom use, and pregnancy were also associated with weapon-carrying.

"All this teenage angst is a result of pain and suffering. Suicide, pregnancy, drugs all are a solution to our feelings of sadness, low self-esteem & isolation. We feel like our back is to the wall. Nobody is on our side, everyone is against us. So the only real answer is to raise the next generation in environment of love. And we will."

"We have a nice school, with good kids."

Nearly one in three students reported being harassed at school.

"I don't like how people tease me about being gay."

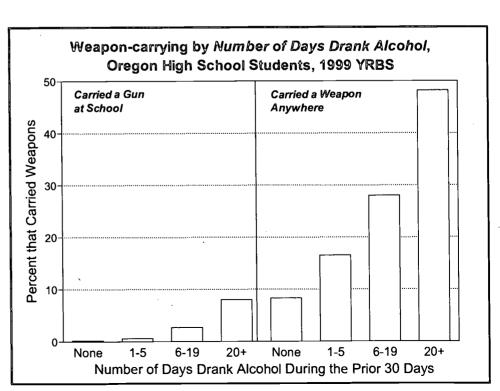
SCHOOL VIOLENCE

Some researchers have reported that students carry weapons for personal safety, but others believe that neither victimization nor fear for safety in schools is associated with weaponcarrying; some adolescents are thought to carry guns because they may be disproportionately more likely to lead risky lives or associate with violent people. Regardless of whether weapon-carrying is a response to perceived threats or used to make threats, weapon carriers are more often involved in violence. Oregon students who carried a gun to school were 14 times more likely to be seriously injured in a fight (i.e., requiring treatment by a physician or nurse) than were students who did not take a gun to school.

Harassment. The YRBS asked students about three types of harassment: unwanted sexual attention, race, and perceived sexual orientation; other types of harassment were not measured. Three in ten students (29%) reported being harassed at school (for one or more reasons) during the previous 12 months. The data from the

survey do not show whether weaponcarrying by a student occurred before or after being harassed, but in any case, compared to their non-harassed peers, harassed students were more likely to carry weapons to school. Furthermore, as the number of types of harassment (race, sex, perceived sexual orientation) increased, so did the likelihood that the harassed students would carry weapons; 7.1% of students free from harassment reported carrying weapons to school compared to 31.4% of students receiving all three types of harassment. These highly harassed students were 36 times more likely to take a gun to school.

Threats and Injuries. Six percent of students reported being physically threatened or injured with a weapon while at school during the previous 12 months. Those who had been on half a dozen or more occasions were six times more likely to take a weapon of any kind to school (42.1% vs. 6.7% of those who reported no threats) and 45 times more likely to carry a gun to school (17.8% vs. 0.4%). Students are not the only ones who are threatened;





nationally, an estimated 900 teachers are threatened daily and 40 are physically attacked.⁵

Physical Fights. Every tenth student reported being in a physical fight at school during the previous 12 months and they too were more apt to carry a weapon, particularly at school. Those involved in six or more fights were nine times more likely to take a weapon of any kind to school (53.7% vs. 6.0%) and were 86 times more likely to take a gun to school (25.7% vs. 0.3%). Physical fighting is often a precursor to other violent interactions and may become potentially fatal in the presence of a weapon.

WHY STUDENTS CARRY WEAPONS

Students have been asked many times in surveys why they carry weapons, but researchers have also looked beyond their answers.

What the Students Say

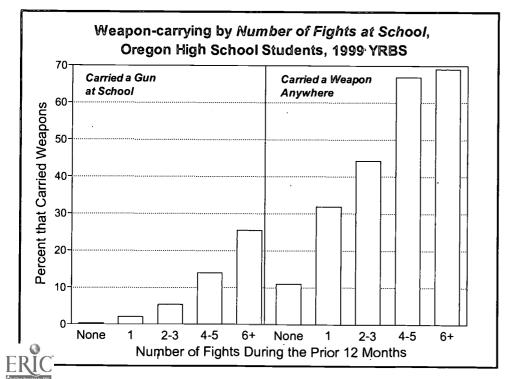
A Harris survey of students reported that when asked "What is the single most important reason some students carry a weapon?" 41 percent of students answered "for protection against possible attacks by other

people"; 34 percent said to "show off and impress their friends"; 10 percent responded "because it makes them feel important"; 10 percent indicated "because they are angry and want to hurt someone"; and 4 percent answered "because their friends carry weapons." Similar results have been reported by others.

What Researchers Say

Other studies have gone beyond the answers given by the adolescents themselves. One showed that weapons are not brought to school because of a heightened need for protection, but instead may be in response to normative influences in school. Another showed that weapon-carrying at school was more strongly associated with use of violence and abuse of substances at school than with previous victimization and fear of attending school. A study of fifth-, seventh-, and ninth-grade students in the Cleveland public school system, found that: students perceived guns as fun; students believed that safety is achieved primarily through personal power, not by relying on adults to change the environment; students displayed confi"BE MORE accepting of others, it's crap like what happened in Denver that shows people need to be more accepting of others differences. Teach acceptance of diversity more."

Students involved in six or more fights at school were 86 times more likely to have a gun at school.



"Things need to happen about school violence. I don't want to be in doubt that I can die today at school. Guns should be banned!!"

"Guns are cool."

"I don't do any drugs, drinking or smoking, but I'm the exception. After that thing in Colorado happened it really opened my eyes. There is a lot of drugs, alcohol going around a lot, more than one would think. Our world, our schools, our families are so curupt. Something really, really needs to be done before we perish."

dence in aggression and lack of confidence in their own interpersonal skills such as negotiations, assertiveness, and conflict resolution; many students believed that shame which results from an insult can be undone only through aggression. In another study of inner city junior high school students, gun-carrying appeared to be a component of highly aggressive delinquency rather than a purely defensive behavior.⁵

SOME UNDERLYING FACTORS

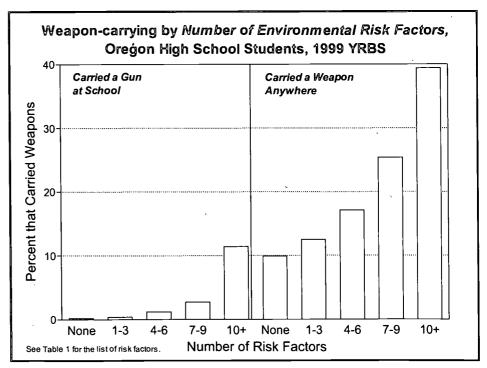
The Youth Risk Behavior Survey identified many elements associated with youth weapon-carrying, only a few of which may be causative, but all of which too often form a constellation of risk factors. Students who are exposed to deleterious factors in the home or who engage in multiple risk behaviors are more likely to carry weapons and as the number of risk factors increase, so does the likelihood of weapon-carrying. Some of these behaviors can serve as potential markers of weapon-carrying. Other factors have been widely cited as contributing to weapon-carrying by youth and its resultant violence;

these include family dynamics, the widespread availability of firearms, and the portrayal of violence as entertainment.

Family Dynamics

The survey data do not tell us why Oregon youth carry weapons, but do offer clues. The home environment precedes any risky behavior that a child may eventually engage in, and many studies have shown that a child's earliest environmental experiences affect their later behavior. Only a few questions in the YRBS survey relate to the students' home environment, but taken together, suggest that the family's socioeconomic status, communication within the family, and treatment of the child are linked to subsequent weapon-carrying and other risky behaviors by the child. The presence of domestic violence and other dysfunctional family conduct can put youth at risk of engaging in violent behavior. A recently released state survey found that 13 percent of Oregon women interviewed were the victims of domestic physical assault, coercion, or injury during the prior year; in 60

"It just really bothers me that my parents are always on both computers & I basically have raised my younger sisters."





percent of these homes, children 17 or younger witnessed the violence and two-thirds saw or heard the abuse at least once per month.⁷

Gun Availability

The United States. In a survey of North American and European countries, the United States had the highest household gun ownership rate. According to a 1994 survey, an estimated 44 million Americans owned 192 million firearms, 65 million of which were handguns. In a study of Seattle high school students, 34 percent said they had easy access to handguns and 33 percent of handgun owners said they had fired at someone.⁵

Oregon. Half of all Oregon households (51%) contain firearms, and in one in six of the households (16%) where both children and guns were present, the guns were loaded and unlocked. Household gun ownership ranges from 3 in 10 in Multnomah County to 9 in 10 in some central and eastern Oregon counties. And, communities with an above-average prevalence of gun ownership are more likely to have higher gunshot death rates (see p. 16).

According to YRBS respondents, most (69%) of the guns carried to school or elsewhere belonged to the students themselves; the remainder either belonged to another household member (13%) or to someone else (17%).

The state's firearm laws prohibits possession of firearms by juveniles except "temporarily for hunting, target practice or other lawful purpose," yet YRBS data suggest that no fewer than 4,600 Oregon public high school students owned guns. In the case of firearms other than handguns, minors may possess with permission of a parent or guardian. Juveniles may not legally possess a firearm if convicted of the equivalent of an adult or misdemeanor of violence.

Video

The National Institute of Mental Health has concluded that "there is increasing consensus among the research community that violence on television does lead to aggressive behavior by children and teenagers who watch the programs." Physicians and other scientists have reported that exposure to media violence correlates with aggression, callousness, and an appetite for violence among both adults and children (who have a harder time distinguishing reality from fiction) - particularly, with the viewing of "reality" television shows (e.g., Cops). The widespread exposure to violence of America's youth and easy availability of guns is thought to have a predictable outcome: children who see their "heros" in the entertainment industry resolve problems with automatic weapons are more likely to see violence as a solution to their own problems. One 22-year study showed that the more television an eightyear-old watched, the greater the likelihood at age 30 that he or she would: be aggressive when drinking; commit serious crimes; and punish his/ her own children harshly (even after controlling for other factors).

Viewing violence on the screen has been reported to have the following negative effects: it increases the viewer's fear of becoming a victim of violence, with a resultant increase in self-protective behaviors and increased mistrust of others; it desensitizes the viewer to violence, resulting in a callous attitude toward violence directed at others and a decreased likelihood of taking action to help a victim of violence; it increases the viewer's appetite for becoming involved with violence; it often demonstrates how desirable commodities can be obtained through the use of aggression and violence. Other studies have suggested that children who are heavy viewers of television are: more aggressive, more pessimistic,

"GUNS ARE NOT THE PROBLEM IT IS THE ENVIRONMENT THAT THESE KIDS ARE GROWING UPIN. IT IS NOT JUST ONE THING EITHER! IT IS THE SCHOOLS, PARENTS, TV, MOVIES, . . . ETC."

Many researchers have concluded that exposure to violence as "entertainment" increases the risk of violent behavior of children.

"I also think that television and movies & video games are the causes of this violence, and without them, I wouldn't know anything about guns, rifles, & heavy weapons. The NRA is also responsible for kids being able to access guns easily. We don't need your automatic or any such. Go to hell for all the pain you've caused."

"I go to school everyday. And everyday I am terrified of being shot or killed. More discipline in the schools, and stronger, more authoritative administrators are needed! Don't be afraid to punish a bad or violent child! What's more important, his self-esteem, or my life?"

"We need more peer counselors, and programs to stay focused on our futures. Many people have given up on school already, or have young children now. Help us."

"I think that teachers and staff members need to pay more attention to kids who are depressed a lot. When they get in these depressions, many become violent and may harm others or attempt suicide. If we all just show little more concern & compassion, that would be a real plus. This country has had enough shootings in schools. We all need to work together help these kids so that we can put a stop to school violence once and for less imaginative, less sympathetic, less capable students, and weigh more, than their lighter-viewing counterparts.

One researcher concluded "children learn what they see - and unfortunately, in our country through news reports, movies, television, and everyday life . . . children see violence; and they do not learn that violence is bad. Too often, they learn that violence is an acceptable way to resolve conflict; furthermore, many children, because of their home and neighborhood environments, have little opportunity to learn about alternative ways to settle disputes."8

PREVENTION

The American Academy of Pediatrics has recommended six strategies for reducing firearm caused morbidity and mortality in adolescents. These include: legislative and regulatory measures to reduce the availability of guns in the adolescent's environment; health care provider promotion of family responsibility to create a gun-safe home; highest risk adolescents should be identified and provided support and intervention services; community coalition development to address public education, legislation, protective interventions, and societal action to reduce gun violence; school violence prevention curriculums, including firearm violence, coping skills, conflict management, and risk awareness approaches; and additional research on the precursors and correlates of firearm injuries, and on interventions and prevention strategies for children, adolescents and their families.

Availability of Guns

Guns are more likely to kill than other weapons. A drop in the proportion of violent events in which guns are used would decrease the lethality of violence, resulting in fewer deaths and serious injuries. Thus, efforts to reduce the numbers of deaths and injuries from firearms should identify the precursors and correlates of firearm injuries and implement researchbased prevention strategies, as well as the root causes of violence. Public education should be directed toward teaching safe gun storage and increasing public awareness about the risks of having a gun in the home. Gun owners should be made aware, and convinced, of the risks of injury posed by loaded guns to unsupervised children and adolescents.

An evaluation of the effect of safe storage laws found that states that passed laws making gun owners criminally liable if someone is injured because a child gains unsupervised access to a gun have subsequently experienced a 23 percent decrease in unintentional shooting deaths among children 15 or younger.9

Gun-Free Schools

Legislation. In 1994, the federal Gun Free Schools Act was signed into law. The act requires, among other actions, that schools expel for at least one year students who were caught carrying a gun, and gives schools discretion to modify the expulsion policy on a case-by-case basis should extenuating circumstances exist.

A recent report from the U.S. Department of Education provides evidence that schools are complying with this legislation; a total of 3,930 students were intercepted with firearms and expelled during the 1997-98 school year. 10 In the majority of cases, the weapon involved was a handgun. Oregon's expulsion rate for firearm possession ranked second highest among the states. 10 (The highest rate was reported for South Dakota.)

Last summer, Gov. Kitzhaber signed into law SB 344. It requires that school employees report to the appropriate authority any person they believe has unlawfully possessed a firearm or destructive device on school grounds within the previous Continued on page 14.

Table 2. Selected Demographic and Behavioral Characteristics by Hours of Television Watching, Oregon High School Students, YRBS, 19991

Oregon High School Students, YRBS, 1999							
Demographic and Family Characteristics	Percentage of Students Who watched TV on an Average School Day ²						
	≤1 Hour	5+ Hours	Ave # Hrs				
Total	47.6	5.6	1.8				
Gender							
Male	42.1	7.3	2.0				
Female	52.8	4.0	1.6				
Grade							
9	41.7	7.2	2.0				
10	46.5	6.1	1.8				
11	52.0	4.6	1.7				
12 .	51.8	3.9	1.6				
Race/ethnicity³							
White	49.4	4.6	1.7				
Indian	44.3	8.9	2.0				
Pacific Islanders	41.7	9.7	2.1				
Asian	41.5	11.7	2.2				
Hispanic .	33.5	11.3	2.3				
Black	31.7	13.6	2.5				
School Socioeconomic Status ⁴			<u> </u>				
1 (lowest)	39.2	8.4	2.1				
2	43.6	6.6	1.9				
3	48.8	5.0	1.7				
4 (highest)	51.9	4.4	1.7				
Number of Caring Adults							
None	44.2	9.3	2.0				
1	45.4	6.2	1.9				
2+	49.2	4.3	1.7				
Smokers in the Household							
None	51.1	4.6	1.7				
Yes - But Not Inside	43.3	6.2	1.9				
Yes - Inside	39.3	8.5	2.1				
Behavioral Characteristics		of Behaviors s of TV Watc					
	≤1 Hour	5+ Hours	Prev. Ratio ⁶				
Attempted Suicide ⁷	6.3	9.2	1.5				
Began Smoking Before Age 11	7.4	15.8	2.1				
Began Drinking Before Age 11	13.2	23.9	1.8				
Sniffed Inhalants 3+ Times ⁸	0.4	1.6	4.0				
Abused Cocaine 3+ Times ⁸	0.6	1.1	1.8				
6+ Fights at School ⁷	0.4	1.4	3.5				
Carried a Weapon ^a	12.5	20.8	1.7				
Carried a Gun³	4.0	5.6	1.4				
Carried a Weapon to School ⁸	7.1	12.1	1.7				
Carried a Gun to School ⁸	0.7	1.9	2.7				
1 Paged on 22 013 weighted seems from 100							

- 1. Based on 22,913 weighted cases from 109 schools.
- 2. Indicates the proportion of students who watched a given amount of TV (e.g., 7.3% of males watched five hours or more).
- Students could check one or more responses to describe their race/ethnicity; for example, a student who checked both "Hispanic" and "American Indian" would be represented in each of the two categories.
- The Oregon Department of Education assigns a numeric rank to each school in the state based on the percentage of students eligible for free or reduced price lunch, student mobility, student attendance, and the level of education of the most educated parent.
- Indicates the proportion of students who engaged in risky behavior by the number of hours
 of television they watched on an average school night (e.g., 9.2 percent of students who
 watched an average of 5 or more hours of TV reported trying to kill themselves during the
 prior 12 morths).
- 6. The prevalence ratio was calculated by dividing the percentage in the "5+ Hours" column by the percentage in the " \leq 1 Hour" column.
- Ouring the previous 12 months.
 ing the previous 30 days.

TELEVISION AND RISKY BEHAVIOR

Much has been written about the effect of television on today's youth. However, little of it has been specific to Oregon. During 1999, for the first time, the Oregon Youth Risk Behavior Survey (YRBS) included a question about the number of hours the state's high school youth spent watching TV on the average school day.* Like all YRBS data, these are self-reported statistics and do not include the responses of the 22% of Oregon youth who do not complete high school, youth who are more likely to engage in risky behaviors.

The good news is that about half of all students watched no more than an hour of television nightly. The adjacent table shows the proportion of students who were light viewers (no more than one hour on the average school night) and heavy viewers (five or more hours per night) by demographic characteristics, and measures of family cohesion and lifestyle. Note that these associations are not necessarily causative (e.g., a student's race does not determine the amount of television he or she watches). Also shown at the bottom of the table are associations between selected risk behaviors and television watching.

Males and non-whites were most likely to report heavy TV watching; males were almost twice as likely as females and African-Americans were three times as likely as whites to watch more than five hours on a school day. Students attending schools with the lowest measures of socioeconomic status were nearly twice as likely to be heavy viewers than were their counterparts attending the highest ranked schools.

The home environment is, perhaps, the single most important determinant of a child's world view and behavior. The YRBS data show that students lacking caring adults in their lives were more than twice as likely to be heavy television viewers, compared to those with at least two caring adults. Tobacco smoking can be considered a surrogate measure of socioeconomic status as it is more common among persons with lower income and less education. Data show that students living in homes where other occupants smoked in the home were nearly twice as likely to watch five or more hours of TV daily than were those living in homes with non-smokers.

Heavy viewers of television were more likely to report engaging in many risk behaviors. They were about half-again as likely to attempt suicide and about twice as likely to have begun smoking and/or drinking before their eleventh birthday. The odds of abusing inhalants (e.g. "huffing" glue or paint) was four times greater for heavy viewers than light viewers, the highest prevalence ratio recorded among individual behaviors. Frequent television watching was also associated with fighting at school and weapon-carrying. Students watching five hours or more of television daily were almost three times more likely to carry guns to school.

In summary then, heavy television-watching is associated with a host of other unhealthy, and sometimes dangerous, behaviors. As with many other undesirable behaviors, it is most common among males and those in lower socioeconomic categories. Frequent television viewers are more likely to have begun drinking and smoking at a very early age, to participate in fights, and to carry weapons with them.

*The YRBS dld not include questions about video games or other forms of video entertainment.

"I think schools today are becoming a battleground and not a place for education. Violence between students and harassment continue to get worse! Students are scared and the tension only grows. The only thing left is to have the school board do something! The student is helpless."

"There isn't anything anyone can do to keep a crazy kid from blasting everyone if they were going to."

"I KNOW OF AT LEAST ONE PERSON WHO HAS AN ANGER MANAGEMENT PROBLEM. I'VE TOLD COUNSELORS BUT NO ONE IS DOING ANYTHING ABOUTIT. SHE HAS POTENTIAL TO CAUSE DAMAGE. SHE HAS IN THE PAST VERBALLY & PHYSICALLY HARASSED MEBUTNOTHING HAS EVER BEEN DONE ABOUT HER PROBLEM. I'M SCARED OF THE POTENTIAL TO CAUSE HARM. SHE NEEDS HELP!!"

"Makeguns illegal, protection by guns is a joke, all it really does is set off a chain reaction of everyone needing some 'protection.'"

120 days. Law enforcement agencies are required to conduct an investigation. The law also allows courts to detain any youth believed to have carried a firearm or destructive device on public property if probable cause exists. A mental health assessment or screening of a youth may be ordered (during which time the youth may be detained for one week).

Detection and confiscation of weapons. Schools have employed various strategies to confiscate weapons and deter students from bringing weapons on to school grounds, including random locker searches, metal detectors, and policies requiring clear plastic or mesh book bags so that weapons cannot be easily hidden. During the 1997-98 school year, 135 Oregon students were expelled for carrying firearms and/or explosive devices to school. An additional 392 students were expelled for carrying other weapons such as knives and clubs to school.

Schools should incorporate weapons possession situations into their school crisis plans, including the development of crisis response teams. Educators should be provided training and guidelines on how to handle individuals on campus who may be armed. Common sense would suggest that safe schools are central to the concept of safe communities and that schools that build alliances within their communities are more likely to achieve a weapon- and violence-free environment.

Family Education

Programs that teach parenting skills to help parents provide a nurturing home environment and that model nonviolent methods of resolving conflict and mediating disputes are believed to be among the most promising strategies to reduce violence among youth. Parents of poorly socialized children often need additional assistance in developing one

or more of the following skills: monitoring the whereabouts of the child, disciplining the child, negotiating in solving problems within the family, and modeling effective social skills.

PREVENTION PROGRAMS

Despite the presence of harassment and violence in schools, schools should not be thought of as especially risky environments. In fact, national data show that the risk is greater away from schools; in 1996, students ages 12-18 were victims of about 255,000 incidents of non-fatal serious violent crime at school and about 671,000 incidents away from school.¹¹

All students need and deserve a safe school environment. In preventing violence, it is important that schools and communities address the full spectrum of situations and behaviors that contribute to a hostile school climate. Students who are victims of bullying, harassment, isolation, rejection, and other early warning signs of violence are at greater risk of bringing weapons into the school. Schools that take specific steps to develop and enforce antiharassment policies, provide staff training on interrupting bullying and harassment, establish clear grievance procedures for students, respect diversity, resolve conflict, and educate parents and students on these issues, can create a positive school environment that benefits all students.

The YRBS included space for student's comments: many respondents indicated the need for confidential counseling by school personnel and the need for schoolbased health centers. Too many students felt there was either inadequate or no source of help for addressing emotional/psychological problems. Statewide, an estimated 6,500 students reported having been depressed (i.e., "Sad" as described on page 4.) and carrying weapons, posing a threat



to themselves and others; an estimated 500 of these students took guns to school. Clearly, there is a need for additional counseling resources in Oregon schools.

Programs to reduce weaponcarrying should target frequent weapon carriers, as well as their peers and families. Because the risk of being assaulted is reportedly a motivation for some weapon-carrying, programs should attempt to reduce the perceived or actual risk of victimization that underlies the need some students feel to carry weapons for self-protection.

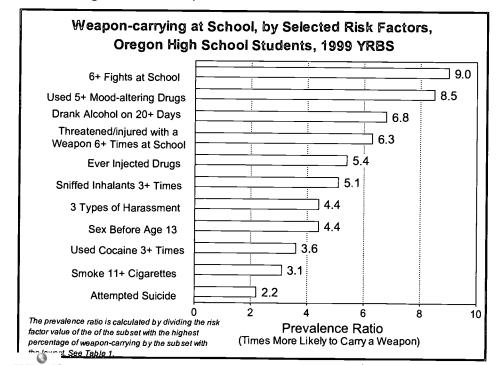
Some YRBS respondents have stated that officials at their schools don't always take action against harassment, bullying, and threats. Yet, it is this lower level of violent behavior that can permeate schools and escalate into serious violence. School officials clearly need to work to eliminate these precursors. In 1998, Governor Kitzhaber issued an Executive Order to develop high-risk juvenile crime prevention partnerships. State, county, and community agencies will focus on youth with more than one of the following risk factors:

- o school failure
- ° substance abuse
- o negative peer association
- o anti-social behavior
- o poorfamily function or support; and
- who are clearly demonstrating atrisk behaviors.

Violence and weapon-carrying are not simply school problems. Only by integrating efforts by diverse disciplines to address different facets of the problem can we shift the focus from reacting to violence to addressing its root causes. These causes are social, environmental, biological, and behavioral in origin; they include poverty, weak family structure, schools of varying quality, exposure to violence (in the media, home, and society), victimization, mental health problems, anger and poor impulse control, racism and homophobia, pervasive harassment and bullying on school grounds, alcohol and drug use, abuse and neglect, ready availability of firearms, and many other factors. Resolving these issues requires cooperation among not only public and private agencies, but, perhaps most importantly, the average citizen.

"Lately I have been scared at times even to come to school. W/all the recent shootings, I wish there was more gun control in the US. What purpose do they serve other than to kill people? And that is exactly what they are doing, only they are killing young and innocent people."

"I think that it's pretty sad that we can't come to school and feel safe. It really isn't fair!! There are people in the school that would seriously hurt someone. Maybe school uniforms would help. I really don't know. I do know that I am sick of coming to school and wondering if I am gonna live through the day or if I will ever see my boyfriend or family/friends ever again."



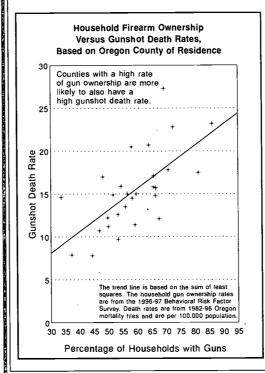
"I think our school is a great school, but we could use a Health Care Center, and some better councelers."

ENDNOTES

- Of the 406 gunshot deaths of youth 19 or younger during 1990-98, 214 were suicides, while homicides (120), unintentional injuries (54), and gunshots of undetermined intent (18) accounted for the remainder.
- Because the YRBS questions asked about weapon-carrying during just the 30 days prior to the survey, this figure may be an underestimate.
- 3. Thoreau HD. Journal. September 7, 1851.
- 4. Based on comments written by students completing the 1997 and 1999 YRBS. The 1999 YRBS was conducted both before and after the shooting at Columbine High School; comments made by students surveyed after the shooting were notable for their expressions of fear for safety.
- 5. Due to space limitations, only selected citations are listed here. All others are available in Weapons and Oregon Teens: What Is the Risk?
- Brennan PA, Grekin ER, Mednick SA. Maternal smoking during pregnancy and adult male criminal outcomes. Arch Gen Psychiatry. 1999; 56:215-219.
- Glick B. 1998 Oregon Violence Needs Assessment: A Report to the Oregon Governor's Council on Domestic Violence. Oregon Health Division and Multnomah County Health Department. Portland. OR. 1999.
- Osofsky JD. Children and Youth Violence: An Overview of the Issues. In: Children in a Violent Society. (Osofsky JD, ed.) The Guilford Press. New York, NY. 1997.
- Cummings P, Grossman DC, Rivara FP, et al. State gun safe storage laws and child mortality due to firearms. JAMA. 1997;278:1084-86.
- United States Department of Education. Report on State Implementation of the Gun Free Schools Act -- School Year 1997-98. http://www.ed.gov/offices/OESE/SDFS/GFSA/part1.html.
- National Center for Education Statistics. Indicators of School Crime and Safety, 1998. http://nces.ed.gov/pubs98/safety/highlights.html.

Household Gun Ownership by County

Elevated community gun ownership rates appear to be associated with an increased risk of a gunshot death of members within the community. The figure (below) displaying the prevalence of household gun ownership in a county versus the gunshot death rate for the same county shows a marked upward trend. In general, gun ownership rates were highest east of the Cascade Range and lowest in the Willamette Valley.



Household Gun Ownership and Gun Storage Practices by County of Residence, Oregon Behavioral Risk Factor Survey, 1996-97

County	% of homes with guns	% of gun homes with guns stored unsafely
Oregon	51	23
Baker	86	29
Benton	44	17
Clackamas	47	24
Clatsop	56	23
Columbia	68	22
Coos	66	31
Curry	69	22
Deschutes	54 66	19 22
Douglas Hood River	53	22
	57	17
Jackson Josephine	57 58	35
Klamath	64	29
Lane	53	21
Lincoln	52	18
Linn	58	31
Malheur	60	21
Marion	50	22
Multnomah	34	24
Polk	59	15
Tilla m ook	48	15
Umatilla	66	19
Wasco	66	21
Washington	37	19
Yamhill	49	15
Combined Cour	nties	1
Crook &	71	30
Jefferson		
Grant & Wheeler	78	20
Union &		
Wallowa	81	37
Hamey &	73	26
Lake	, ,	25
Sherman,	1	
Gilliam &	91	17
Morrow	<u></u>	
Note: Unsafe gun	storage means the	guns are loaded



OREGON HEALTH TRENDS is published by the Center for Health Statistics.

Send comments, questions and address changes ATTN CDP&E or phone (503) 731-4354. Alternate formats available upon request. Material contained in this publication is in the public domain and may be reproduced without special permission. Please credit OREGON HEALTH TRENDS, Oregon Department of Human Services, Health Division, Center for Disease Prevention & Epidemiology, Center for Health Statistics.

Oregon Department of Human Services
Health Division
Center for Disease Prevention & Epidemiology
Center for Health Statistics
800 NE Oregon Street, Suite 225
P.O. Box 14050
Portland, Oregon 97214-0050

Bulk Rate
U.S. Postage
PAID
Portland, Oregon
Permit # 701





U.S. Department of Education

Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

1. DOCUMENT IDENTIFICATION	l i	
Title: A POTENTIAL FOR	VIOLENT INJURY	
Autho DAVID HOPKINS Corpc CENTER FOR HEALTH STOREGON HEALTH DIVISION STREET BOO NE OREGON STREET PORTLAND: OREGON 972	ATISTICS ON #23	Publication Date:
II. REPRODUCTION RELEASE:		
monthly abstract journal of the ERIC system, Res and electronic media, and sold through the ERIC reproduction release is granted, one of the follow	sources in Education (RIE), are usually made avenue of the C Document Reproduction Service (EDRS). Creating notices is affixed to the document.	educational community, documents announced in the ailable to users in microfiche, reproduced paper copy, edit is given to the source of each document, and, if
of the page. The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	NE of the following three options and sign at the bottom The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1	2A	28
Level 1	Level 2A	Level 2B
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only
	nts will be processed as indicated provided reproduction qua produce is granted, but no box is checked, documents will be	
as indicated above. Reproduction from	m the ERIC microfiche or electronic media by p e copyright holder. Exception is made for non-pro	rmission to reproduce and disseminate this document persons other than ERIC employees and its system fit reproduction by libraries and other service agencies
Sign here,→ Signature:	Printed Na	DAVID 1-LOPKINS / RESMECH AND
Organization/Address:	Telephone: E-Mail Add Add DA 110	-731 · Y 4 2 FAX: ress: 2-D-134 Kg 1950 Date: 7 · 20 · 06

LTAREOR.VS

(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Dis	tributor:	
Address:	DAVID HOPKINS CENTER FOR HEALTH STATISTICS OREGON HEALTH DIVISION 800 NE OREGON STREET #23 PORTLAND, OREGON 97232	•
Price:	प्र	

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:				
Address:				
!		•		

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

University of North Carolina at Greensboro

ERIC/CASS

201 Ferguson Building

PO Box 26171

Greensboro, NC 27402-6171

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility 1100 West Street, 2nd Floor

Laurel, Maryland 20707-3598

Telephone: 301-497-4080 Toll Free: 800-799-3742 FAX: 301-953-0263

e-mail: ericfac@inet.ed.gov WWW: http://ericfac.piccard.csc.com

EFF-088 (Rev. 9/97)

